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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/057,066	01/25/2002	Sihai Xiao	TVW/APP35US	5026

59906 7590 07/26/2006
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EXAMINER

PICH, PONNOREAY

ART UNIT	PAPER NUMBER
2135	

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/057,066	XIAO, SIHAI	
	Examiner	Art Unit	
	Ponnoreay Pich	2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22, 24-46, 48 and 49 is/are pending in the application.
- 4a) Of the above claim(s) 7-13 and 31-37 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 14-22, 24-30, 38-46, and 48-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Claims 1-22, 24-46, and 48-49 are pending, of which claims 1-6, 14-22, 24-30, 38-46, and 48-49 were drawn to elected claims. Claims 4-5, 14-15, 17, 20, 22, 25-30, 38-39, 41-41, 45-46, and 49 were noted by applicant as amended. Claims 23 and 47 were cancelled. Amendments by applicant have been fully noted. Please note new rejections made in light of these amendments below. As per MPEP 2144.03, any well known art statements made in the prior office action not adequately or specifically traversed by applicant are taken as admittance of prior art.

Priority

Applicant's comments and corrections related to the priority of the application have been noted.

Response to Arguments

Applicant's arguments have been fully noted. The following arguments addressed below were not found to be persuasive.

With respect to the 112, second paragraph rejection of claim 1, applicant argues that the rejection in the prior office action is incorrect since it is clear that a hash value of a trust entity certificate is provided as part of the TIO and that associated trust information is provided as part of the TIO. The examiner respectfully disagrees that the rejection was in error. In light of this explanation of what applicant meant to state in claim 1, the examiner now is able to determine that there are commas missing from the claim 1 which caused the claim to be indefinite. Without these commas, the limitation addressed did not make grammatical sense, thus the meaning was unclear. Further

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explanation is provided below. Note that similar limitations have been amended onto claims 46 and 49 and like claim 1, the amended limitation in each claim are indefinite due to missing commas. The rest of the 112, second paragraph rejections are moot due to applicant's amendments.

As per 101 rejections of claims 1-6, applicant argues that claim 1 is directed towards a method for delivering certificate with associated trust information from a trust information provider to a client for verification of a received certificate by the client. The examiner notes that this is the intended practical application of claim 1. Applicant argues the result is clear from the claim and that the client receives a TIO including the hash value of a trust entity certificate as well as associated trust information. Applicant argues this is a concrete, useful, and tangible result. Applicant also argues that other concrete, useful, and tangible result of claim 1 includes the TIO based trust information received by the client enables the client to verify received certificates.... The examiner respectfully disagrees that any of these items pointed to by applicant is a concrete, useful, and tangible result. As previously noted, the intended practical application of the method is delivering certificate with associated trust information from a trust information provider to a client for verification of a received certificate by the client. As applicant has defined a TIO in the specification, a TIO is not necessarily a certificate, thus neither steps recited in claim 1 has accomplished the intended practical application. That is, the client never received the certificates from a trust information provider nor has the client verified a certificate. Thus, there is no concrete, useful, and tangible result that is commiserate with what is recited as the intended practical application. A similar

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traversal applies to applicant's argument for claims 14 and its dependent claims as well as claims 46, 48 and 49. That is, none of what applicant points to as a concrete, useful, and tangible result are commiserate with what is recited as the intended practical application of the method being claimed. Further, using claim 1 as a representative claim once more, one skilled should appreciate that merely providing a client with an object does not yield a useful or tangible result. There is a useful and tangible result when the client does something with the object provided, whether it be storing the object or using the object to accomplish some task. To use an analogy, one could be instructed of a method to stop a person's hunger by providing lunch. The steps of this method could be making a burger and providing the burger to the person. However, until the person eats the burger, there is no concrete, useful, or tangible result that is commiserate with the intended practical application of stopping the person's hunger by providing lunch.

As per the other 101 rejections, applicant has amended the claims so that per se descriptive material is not claimed. This overcomes the previous 101 rejections, but please note new 101 rejections below that are made in light of these amendments.

As per the 103 rejections, applicant uses claim 1 as a representative claim and argues that Fischer does not disclose indicating a trust level for a trusted entity associated with a trust entity certificate. Applicant argues that instead, Fischer discloses that a certifier creates a certificate which includes a trust level and that the trust level in the created certificate is associated with the individual to which the certificate is sent. That is Fischer merely teaches construction of a certificate having

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trust level associated with a user who will use the certificate for exchanging secure transactions. The examiner notes that there is nothing recited in the claim which prevents a user from being considered a trusted entity. A broad but reasonable interpretation of "trusted entity" can include a user since any entity that has trust associated with it is a "trusted entity". As applicant admits, the user has a trust level associated with him/her. Please note that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Applicant's remaining 103 arguments are essentially the same as what was presented for claim 1 and are traversed for the same reasons given herein.

Observations with Regards to Apparatus Claims

Note that claims directed to apparatus must be distinguished from the prior art in terms of structure rather than function. In *re Danley*, 120 USPQ 528, 531 (CCPA 1959). "Apparatus claims cover what a device is, not what a device does." (Emphasis in original) *Hewlett – Packard Co. v. Bausch & Lomb Inc.*, 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). A claim containing a "recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus" if the prior art apparatus teaches all the structural limitations of the claim. *Ex parte Masham*, 2 USPQ2d 1647 (Bd. Pat. App. & Inter. 1987).

Expressions relating the apparatus to contents thereof during an intended operation are of no significance in determining patentability of the apparatus claim.” Ex parte Thibault, 164 USPQ 666, 667 (Bd. App. 1969). Furthermore, “[i]nclusion of material or article worked upon by a structure being claimed does not impart patentability to the claims.” In re Young, 75 F.2d, 25 USPQ 69 (CCPA 1935) (as restated in In re Otto, 312 F.2d 937, 136 USPQ 458, 459 (CCPA 1963)). “The manner or method in which such machine is to be utilized is not germane to the issue of patentability of the machine itself”. In re Casey, 370 F.2d 576, 152 USPQ 235 (CCPA 1967).

Claim Objections

Claim 20 is objected to because of the following informalities: Claim 20 recites “the initial TIO” and “said initial TIO”. The examiner respectfully requests applicant consistently use either “said” or “the” in referring to objects because inconsistently using “said” and “the” when referring to the same object seems to imply what are being referred to are different objects. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-6, 24, 26-30, 39-45-46, and 48-49 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. As per claim 1, the limitation “providing as part of said TIO a hash value of a trust entity certificate and associated trust information indicating a level of trust for a trusted entity associated with said trust entity certificate” was rejected as being indefinite in the prior office action. This rejection is maintained. In light of comments by applicant, the examiner believes that applicant meant to recite the following: “providing, as part of said TIO, a hash value of a trust entity certificate and associated trust information, indicating a level of trust for a trusted entity associated with said trust entity certificate”. Note that without the commas added by the examiner, the clause is grammatically incorrect, thus rendering the meaning of the clause indefinite.
2. Limitations in amended claims 46 and 49 are also rejected for being indefinite for the same reason explained above for claim 1. As per claim 46, the examiner believes that applicant meant the following: “providing, within said TIO, a hash value of a trust entity certificate and associated trust information, indicating a level of trust for a trusted entity associated with said trusted entity certificate”. As per claim 49, the examiner believes applicant meant the following: “providing, as part of said TIO, a hash value of a public key embedded in a certificate that represents a trusted entity and trust information, indicating a level of trust for the trusted entity associated with said certificate”.
3. As per claims 24, 26-30, and 39-45, note that the claims are directed at an apparatus. The patentability of an apparatus is defined by its structure rather than what it does or any materials worked on by the apparatus. The claims do

not further define the structure of the apparatus as claimed in their respective parent claims, thus it does not appear that what is recited in the claims further limit the parent claims since the limitations recited therein either define what the apparatus does or material worked on by the apparatus.

4. Any claims not specifically addressed are rejected by virtue of dependency.

Claim Rejections – 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-6, 14-22, 24-30, 38-46, and 48-49 are rejected under 35 U.S.C. 101

because the claimed invention is directed to non-statutory subject matter.

1. Claim 1 is directed towards a method which lacks a concrete, useful, and tangible result, therefore is non-statutory. Claims 2-6 are dependent on claim 1 and also do not recite a concrete, useful, and tangible result, thus are also non-statutory.
2. Claim 14 is directed towards a method which lacks a concrete, useful, and tangible result, therefore is non-statutory. Claims 15-20, which are dependent on claim 14, also do not recite any concrete, useful, and tangible result.
3. Claim 22 is directed towards an apparatus comprising a client. One skilled should appreciate that a client can be implemented as software per se. Software

by itself is not statutory. Applicant must claim at least one hardware (without a purely software alternative) as part of the structure of the claimed apparatus for claim 22 to be statutory. Claim 24 also appears to be directed towards software per se, thus is not statutory.

4. Claim 25 is directed towards an apparatus comprising a client, which as discussed in claim 22 is software per se, thus is not statutory. Claims 26-30 also are directed towards software per se, thus are not statutory.
5. Like claims 22 and 25, claim 38 and its dependent claims are directed towards software per se, thus are not statutory.
6. Claim 46 is directed towards a method which lacks a concrete, useful, and tangible result, therefore is non-statutory. Claim 48 is dependent on claim 46 and also does not recite a concrete, useful, and tangible result, thus is also non-statutory.
7. Claim 49 is directed towards a method which lacks a concrete, useful, and tangible result, therefore is non-statutory.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 22, 24-30, and 38-45 are rejected under 35 U.S.C. 102(a/e) as being anticipated by Samar (US 6,304,974).

Claim 22:

As per claim 22, Samar discloses an apparatus comprising a client (Fig 1, item 118).

Note that phrase “for receiving a trust information object (TIO) associated with said client” indicates an intended use of the client, but does not define the structure of the apparatus, thus does not have patentable weight. The clause which begins “said TIO comprising a hash value...” describes a material worked on by the client, but as observed above, materials worked on by an apparatus does not define the structure of the apparatus, thus does not have patentable weight.

Claim 24:

As per claim 24, the limitations recited therein further define the TIO. However, the TIO is not a structure which the apparatus of claim 22 comprises. Rather, the TIO is a material worked on by the apparatus, thus the limitations further recited in claim 22 do not further limit the structure of the claimed apparatus of claim 22. As such, claim 24 is rejected for the same reasons given in claim 22.

Claim 25:

As per claim 25, Samar discloses an apparatus comprising a client (Fig 1, item 118).

Note that the phrase “for receiving a trust information object (TIO) associated with said client” indicates an intended use of the client, thus is not given patentable weight. The wherein clause recited in claim 25 defines the TIO, but because the TIO is not a structure of the claimed apparatus, the wherein clause does not carry patentable weight.

Claims 26-30:

Claims 26-30 do not further define the structure of the claimed apparatus of claim 25, thus nothing further recited in claims 26-30 have patentable weight. Claims 26-30 are rejected for the same reasons given in claim 25.

Claim 38:

As per claim 38, Samar discloses an apparatus comprising a client (Fig 1, item 118) having embedded therein a trust information object (col 5, lines 19-27).

The phrase that the TIO comprises “a hash value of a trust entity certificate and associated trust information indicating a level of trust for a trusted entity associated with said trust entity certificate” defines a material worked on by the client, i.e. the TIO, thus does not have patentable weight. One skilled should appreciate that a TIO is a type of data, thus if a client is able to have one type of data embedded within it, it is capable of having any other type of data embedded within it. Thus, the structure of the TIO does not in any way define the structure of the apparatus.

The two wherein clauses recited in claim 38 define something the client does and something a different apparatus than the one being claimed does, thus also do not have

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patentable weight. Note that as recited, a server is not being claimed as part of the apparatus of claim 38.

Note further that as per MPEP 2111.04, claim language such as wherein clauses that suggests or makes optional but does not require steps to be performed, or by claim language that does not limit a claim to a particular structure does not further limit a claim, thus does not carry patentable weight. The two wherein clauses of claim 38 also do not carry patentable weight in light of what is disclosed in MPEP 2111.04 since neither clause further limits the structure of the apparatus.

Claims 39-45:

Claims 39-45 do not further define the structure of the claimed apparatus. Instead, the limitations further recited therein either define a material worked on by the claimed apparatus or define what the apparatus does. As the patentability of an apparatus depends on its structure, claims 39-45 are rejected for the same reasons given in claim 38.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-4, 6, 14-21, 46, and 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samar (US 6,304,974) in view of Vogel et al (US 6,816,900) and further in view of Fischer (US 4,868,877).

Claim 1:

Samar discloses the limitations of providing a trust information object (TIO) to said client (col 5, lines 19-61). Note that TIO is a broad term and can read on the wallet disclosed by Samar (Fig 2), directory service (Fig 1, item 110), digital certificates, signatures, or anything else that provides trust information.

Samar does not explicitly disclose providing as part of said TIO a hash value of a trust entity certificate and associated trust information indicating a level of trust for a trusted entity associated with said trust entity certificate. However, Vogel discloses providing as part of said TIO a hash value of a trust entity certificate and associated trust information (col 2, lines 27-37) and Fischer discloses indicating a level of trust for a trusted entity associated with said trust entity certificate (col 4, lines 24-37; col 4, line 34-col 5, line 8; and Fig 5, item 116).

At the time applicant's invention was made, it would have been obvious to one of ordinary skill to incorporate Vogel and Fischer's teachings within Samar's invention according to the limitation recited in claim 1. One of ordinary skill would have been motivated to incorporate Vogel's teachings because the use of hashes would allow for an easy way to organize certificates listed in Samar's TIO, i.e. the wallet or directory service. Note Vogel disclosed that the hash values in the certificate list are used to

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verify the integrity of the certificates and to indicate which are to be removed or modified (col 2, lines 48-52). One of ordinary skill would have incorporated Fisher's teachings by indicating a level of trust for a trusted entity associated with said trust entity certificate. One of ordinary skill would have been motivated to do so because it is common in the art of computing to not only define whether something should be trusted, but just how much it should be trusted. This is the reason, for example, that there are multiple types of user accounts available for an operating system, i.e. administrators, power users, regular users, restricted users, etc.

Claim 2:

Samar further discloses wherein said TIO comprises any of: a trusted entity's certificate; a trust vector of said trusted entity's certificate; a value indicating a number of signatures required for a next update; a date said TIO is created; and a digital signature of all data including said certificate, trust vector, number of signatures, and timestamp, contained in said TIO (Fig 2).

Claims 3:

The limitation of wherein said hash value is determined using any of MD5 and SHA-1 is obvious to Samar's modified invention as it is disclosed by Vogel (col 7, lines 45-63).

Claim 4:

The limitation of wherein said TIO conforms to the PKCS#7 standard is obvious to Samar's modified invention as Vogel discloses the PKCS#7 standard being used to sign messages (col 7, lines 37-44). It would have been obvious to have the TIO in

Samar's modified invention conform to the PKCS#7 standard because the PKCS#7 standard offers a high level of security.

Claims 6:

Samar does not explicitly disclose saving a copy of said TIO in a persistent memory during said client's build time. However, the examiner asserts that it was well known in the art to save a copy of a TIO in a persistent memory during said client's build time, i.e. certificates, passwords, or keys are often assigned to a client when the client is built and saved in static memory to prevent the information from being lost when the client loses power.

At the time applicant's invention was made, it would have been obvious to further modify Samar's invention such that a copy of the TIO was saved in a persistent memory during said client's build time. One of ordinary skill would have been motivated to do so because it was common to assign trust information to a client during build time and to save it in persistent memory to prevent lost of the information due to power failure.

Claim 14:

Samar discloses the limitations of:

1. Embedding a trust information object (TIO) within said client (col 5, lines 19-61 and col 6, lines 27-35).
2. Said client connecting to said server to determine whether a new TIO is available (col 8, lines 26-39).
3. Said server sending a new TIO to said client if there is a more recent TIO (col 8, lines 39-44).

Samar does not disclose said TIO comprising a hash value of a trust entity certificate and associated trust information indicating a level of trust for a trusted entity associated with said trust entity certificate. However, Vogel discloses said TIO comprising a hash value of a trust entity certificate and associated trust information (col 2, lines 27-37) and Fischer discloses indicating a level of trust for a trusted entity associated with said trust entity certificate (col 4, lines 24-37; col 4, line 34-col 5, line 8; and Fig 5, item 116). At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Samar's invention using Vogel and Fischer's teachings according to the limitations recited in claim 14. One of ordinary skill would have been motivated to incorporate Vogel and Fischer's teachings within Samar for the same reasons given in claim 1.

Claim 15:

Samar further discloses sending a TIO including a signing certificate to said client, wherein trust information of said signing certificate indicates that said signing certificate can be trusted for signing said TIO (col 4, lines 31-42).

Claim 16:

Samar further discloses wherein said client fetches said TIO from a trusted server, said client ensuring that a root certificate that signed said signing certificate is contained in said TIO (Fig 5).

Samar does not disclose said root certificate is not revocable. However, the examiner asserts that non-revocable certificates were well known in the art at the time

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applicant's invention was made. It would have been obvious to one of ordinary skill in the art to modify Samar's invention such that the root certificate was not revocable because it would indicate a high level of trust for the user of the root certificate.

Claim 17:

Samar further discloses wherein said client verifies a digital signature of said TIO with a signing certificate, along with a TIO sent to said client (col 5, lines 46-51 and col 7, lines 17-23).

Claim 18:

Samar does not explicitly disclose wherein multiple signatures are verified, depending on the number of signatures specified in said TIO; wherein said client hashes said signing certificates one by one; and wherein if proper results are found in said TIO and said certificates are trusted for signing said TIO, then said TIO proves that it was not tampered with.

However, Vogel discloses wherein multiple signatures are verified, depending on the number of signatures specified in a TIO (col 8, lines 9-17). Vogel also does not explicitly disclose wherein if proper results are found in said TIO and said certificates are trusted for signing said TIO, then said TIO proves that it was not tampered with. However, the purposes of signatures are to verify and validate. If proper results are found for the signatures, then by definition, the TIO has proven that it was not tampered with.

It would have been obvious to one of ordinary skill to modify Samar's invention according to the limitation recited in claim 18 in light of Vogel's teachings because it

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would allow one to determine which signatures and certificates stored in the TIO needs to be replaced due to possible security breaches.

Claim 19:

Samar does not explicitly disclose wherein said signing certificates exist in said TIO in said client before said TIO is signed. However, the purpose of signing is to validate an object. It is well known that a certificate authority would not casually sign an object if it did not verify the object first. If it did so, then anything signed by the certificate authority would not be trustworthy as anyone familiar with the CA would understand that the CA has a habit of not verifying before signing. Thus to truly validate the TIO by signing it, the signing certificate must exist in said TIO in said client before the CA signs it. At the time applicant's invention was made, it would have been obvious to one of ordinary skill to further modify Samar's invention according to the limitations recited in claim 19 because it would provide for trustworthy validation.

Claim 20:

Samar does not disclose wherein said TIO is delivered to said client via a broadcast channel; wherein a provider delivers an initial TIO to said client that contains a signing certificate and associated trust information by either of including said signing certificate in the initial TIO saved in a client persistent memory, or by sending the initial TIO to said client through a secure channel before using said broadcast channel.

However, the examiner asserts that the limitation is well known in the art, as discussed in the prior office action. At the time applicant's invention was made, it would have been obvious to one of ordinary skill to incorporate this teaching from the cable

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broadcast industry in Samar's invention because sending a TIO via a broadcast channel is the quickest and cheapest way of distributing the same information to a large group of clients. One of ordinary skill would have been motivated to deliver an initial TIO to the client via a secure channel before using a broadcast channel as this would initially ensure that only authorized clients received subsequent TIO's.

Claim 21:

Samar does not disclose updating said TIO on a per session basis when said TIO is not persistently stored. However, this limitation is well known in the art of cable broadcasting. The TIO used to descramble certain premium shows, i.e. pay-per-view, shows are not stored persistently and must be updated on a per session basis. At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Samar's invention using this teaching from the cable broadcast industry because it would allow for subscription usage of TIO's.

Claim 46:

Claim 46 recites limitations substantially similar to what is recited in claim 1 and is rejected for substantially the same reasons. The difference is that where claim 1 recites "providing a trust information object (TIO) to said client", claim 46 recites "receiving a trust information object (TIO) at said client". One skilled should appreciate that both phrases essentially mean the same thing. Another difference instead of reciting "providing, as part of said TIO...", claim 46 recites "providing, within said TIO...". However, once again both phrases essentially mean the same thing.

Claim 48:

Samar further discloses said TIO comprising any of: a time stamp which indicates a date that said TIO is generated; a trust attribute that comprises trust information associated with an entity represented by its certificate; and a thumb print comprising a hash of a public key embedded in a certificate that represents a trusted entity (Fig 2).

Claim 49:

Samar discloses providing a trust information object (TIO) to said client (col 5, lines 19-61).

Samar does not disclose providing, as part of said TIO, a hash value of a public key embedded in a certificate that represents a trusted entity and trust information, indicating a level of trust for the trusted entity associated with said certificate. However, Vogel discloses a hash value of a trust entity certificate (col 2, lines 27-37). Fischer discloses a public key embedded in certificate that represents a trusted entity (Fig 5). Fischer discloses indicating a level of trust for a trusted entity associated with said trust entity certificate (col 4, lines 24-37; col 4, line 34-col 5, line 8; and Fig 5, item 116)

At the time applicant's invention was made, it would have been obvious to one of ordinary skill in the art to modify Samar's invention according to the limitations recited in claim 49 in light of Vogel and Fischer's teachings. One of ordinary skill would have been motivated to incorporate Vogel and Fischer's teachings for the same reasons given in claim 1. Note that it would have been obvious to provide a hash value of the public key because it would provide a way to verify that the public key belonged to the proper entity.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Samar (US 6,304,974) in view of Vogel et al (US 6,816,900) and Fischer (US 4,868,877) and further in view of applicant's admittance of prior art.

Claims 5:

Samar does not explicitly hard coding a TIO derived from a set of root certificate authority (CA) certificates into said client's software. However, applicant discloses that at the time applicant's invention was made, it was a common approach in the art to hard code a TIO into a client's software (p2, lines 4-6). Further, the examiner asserts that it was also well known in the art to derive a TIO from a set of root CA certificates. This was disclosed by Vogel (col 4, lines 5-37), thus is obvious to Samar's modified invention.

At the time applicant's invention was made, it would have been obvious to one of ordinary skill to further modify Samar's invention by hard coding a TIO derived from a set of root CA certificates into said client's software. One of ordinary skill would have been motivated to hard code a TIO into a client's software because as applicant discloses in the specification, it was a common approach in the art to provide associated trust information (p2, lines 4-6).

Conclusion

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Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ponnoreay Pich whose telephone number is 571-272-7962. The examiner can normally be reached on 9:00am-4:30pm Mon-Fri.

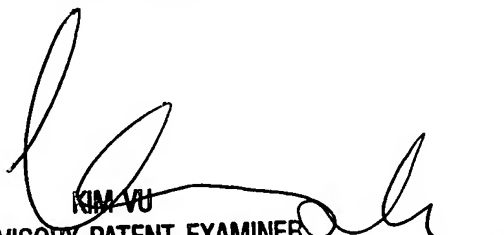
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on 571-272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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PP

Ponnoreay Pich
Examiner
Art Unit 2135


KIM VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100